



PATENT APPLICATION

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Shahriar ALAM, et al. : Atty. Dkt No.: MDHS-378A
Serial No.: 09/272,562 : Group Art Unit: 1771
Filed: March 19, 1999 : Examiner: J. Guarriello
For: SCREEN INK PRINTED FILM :
CARRIER AND ELECTRICALLY :
MODULATED DEVICE USING :
SAME (As Amended) :

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REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. §1.115

Honorable Assistant Commissioner
for Patents
Washington, D.C. 20231

Sir:

Responsive to the Office Action dated October 24, 2001, and further to the Petition for an Extension of Time of Two Months, reconsideration and withdrawal of all outstanding rejections are respectfully requested for the reasons set forth below.

The Office Action was mailed on October 24, 2001, and set a shortened statutory reply period of three months. Attached hereto is a Petition for an Extension of Time of Two Months and authorization to charge the prescribed fee to Deposit Account No. 16-2372. Applicants hereby petition for any extension of time, which may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 16-2372.

Claims 1-11 and 21-27 are currently pending in the application.

The Office Action rejects claims 1 and 2 under 35 U.S.C. §102(b) as being anticipated by Kawai et al. (U.S. Patent No. 5, 403,422). This rejection is respectfully traversed.

Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim. See Connell v. Sears, Roebuck & Co., 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983). Thus, an invention is anticipated if the same device, including all the claim

limitations, is shown in a single prior art reference. Every element of the claimed invention must be literally present, arranged as in the claim. The identical invention must be shown in as complete detail as is contained in the patent claim. Thus, a rejection for anticipation or lack of novelty requires, as the first step in the inquiry, that all the elements of the claimed invention be described in a single reference. Richardson v. Suzuki Motor Co., 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989), *cert. denied*, 110 S.Ct. 154 (1989). Further, the reference must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it. Akzo N.V. v. United States Int'l Trade Comm'n, 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986), *cert. denied*, 482 U.S. 909 (1987); In re Coker, 175 U.S.P.Q. 26, 29 (C.C.P.A. 1972).

Moreover, anticipation requires that all of the elements and limitations of the claim are found within a single prior art reference. There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. See Scripts Clinic v. Genentech, Inc., 18 U.S.P.Q.2d 1001, 10 (Fed. Cir. 1991). An anticipatory reference, however, need not duplicate word for word what is in the claims. Anticipation can occur when a claimed limitation is "inherent" or otherwise implicit in the relevant reference. See Standard Havens Products, Inc. v. Gencor Industries, Inc., 21 U.S.P.Q.2d 1321 (Fed. Cir. 1991), *cert. denied*, 113 S. Ct. 60 (1992). The doctrine of inherency allows modest flexibility [in] situations where the common knowledge of technologists is not recorded in the reference; that is, where technological facts are known to those in the field of the invention. See Continental Can Co. USA, Inc. v. Monsanto Co., 20 U.S.P.Q.2d 1746 (Fed. Cir. 1991). In order to make out a *prima facie* case of anticipation under the doctrine of inherency, it must be clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. The mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency, which requires that the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function. See Continental Can, 20 U.S.P.Q.2d 171749, *citing In re Oelrich*, 212 U.S.P.Q. 323, 326 (CCPA 1981).

Independent claim 1 recites:

1. A screen ink printed film carrier, comprising a thin film carrier layer supporting an ink pattern containing an electrically resistive or conductive material and a curable resin, wherein said thin film carrier layer comprises a curable adhesive material in contact with said ink pattern, and the curable adhesive material being co-curable with the curable resin.

U.S. Patent No. 5,403,422 to Kawai et al. discloses a method for forming decorative plates used in, for example, in skinning buildings. The '422 patent is cited in the Office Action as teaching a base sheet, which is asserted to be similar to the screen ink printed film carrier, impregnated with a thermosetting resin which base sheet can be woven or nonwoven synthetic resin fiber, which is allegedly similar to the fibrous sublayer or textile layer, (column 4, lines 44-50). Kawai et al is also cited for disclosing that a pattern layer, which is allegedly similar to the continuous surface layer of resin with ink, can be formed in a known printing manner using conventional ink, (column 3, lines 30-34). Kawai et al. is also cited as disclosing that the ink composition can be used for forming the pattern layer, which is allegedly similar to the continuous layer, (column 4, lines 28-30). In the Office Action, Kawai et al is additionally cited as disclosing that an adhesive layer is coated on the printed surface (pattern layer). While the Office Action admits that Kawai et al does not disclose the co-curing limitation of claim 1, the Office Action alleges that the limitation is present under the Doctrine of Inherency. In short, the interpretation of the '422 patent in the Office Action is said to possess features similar to those claimed.

Before addressing the instant rejection, Applicants respectfully object to the rejection raised in the Office Action for at least two reasons. First, Applicants are unsure how the Kawai et al reference is being applied in that the Office Action repeatedly states that "A is similar to B." In particular, the Office Action states that a pattern layer is similar to a continuous layer and ink composition is similar to the continuous layer. However, the Office Action does not explicitly describe how the Kawai et al patent discloses each and every limitation recited in claim 1. Secondly, the Office Action re-opened prosecution of claims 1 and 2 based on a new grounds of rejection, which new grounds tacitly admit that at least one limitation of claim 1 cannot be found within the four corners of the Kawai et al. patent.

Turning to the actual rejection, Applicants respectfully submit that Kawai et al. specifically discloses (see Abstract) a method for producing decorative plates, comprising the steps of:

- (i) providing a transfer printing sheet which comprises:
 - (a) a substrate film comprising a synthetic resin,
 - (b) a releasing layer formed, optionally, on the substrate film,
 - (c) a pattern layer formed on the substrate film or on the releasing layer if it is provided, and
 - (d) an adhesive layer formed on the pattern layer;
- (ii) superposing the transfer printing sheet on a base sheet;
- (iii) hot-pressing the transfer printing sheet and the base sheet;
- (iv) peeling the substrate film off the transfer printing sheet thereby to transfer the pattern layer on the base sheet;
- (v) impregnating the base sheet with a thermosetting resin; and
- (vi) hot-pressing the resulting base sheet to harden the thermosetting resin to give a decorative plate.

It is respectfully submitted that the Office Action has not set forth a “prima facie” case of anticipation, since the Office Action is completely silent as to where the recitation in claim 1 regarding “an electrically resistive or conductive material.” The Office Action merely indicates that a pattern can be formed in a known printing manner. Thus, the Office Action does not, and cannot, point to a location within the four corners of the applied reference where such a limitation is disclosed or even suggested. Moreover, the Office Action cannot rely on the Doctrine of Inherency to interpret the limitation in the ‘422 patent, since the Doctrine of Inherency requires that the limitation would necessarily occur in the ‘422 patent. Since conventional printing does not necessarily result in “an ink pattern containing an electrically resistive or conductive material and a curable resin,” as recited in claim 1, the recited element of claim 1 is not inherent in the Kawai et al. reference.

Moreover, it is also submitted that the co-curable recitation in claim 1 cannot be found in the ‘422 patent by way of the Doctrine of Inherency, since the method taught by the ‘422 patent employs

discrete curing steps - a hot-pressing step (iii) to transfer the ink pattern to the base sheet and a hot-pressing step (vi) employed after the base sheet has been impregnated with a thermosetting resin. The '422 patent does not disclose or even suggest that steps (iii) and (vi) can be performed simultaneously.

In short, since the '422 patent does not disclose either an "ink pattern containing an electrically resistive or conductive material and a curable resin" or that "the curable adhesive material [is] co-curable with the curable resin," the '422 patent cannot possibly anticipate the invention recited in claim 1. Thus, the Examiner is respectfully requested to reconsider and withdraw the 35 U.S.C. §102(b) rejection of independent claim 1. Claim 2, depending from independent claim 1, is allowable for all of the reasons given with respect to claim 1.

The Office Action also rejects claims 3-5, 7-11, 23, and 27 under 35 U.S.C. §103(a) as being unpatentable over Kawai et al. (discussed above) in view of Whyzmuzis (U.S. Patent No. 5,714,526) and Ruffoni (U.S. Patent No. 5,185,381) and Neaves et al. (U.S. Patent No. 4,879,148). This rejection is respectfully traversed.

U.S. Patent No. 5,185,381 to Ruffoni¹ teaches a foam absorber material impregnated with an ink which includes a resin carrier and conductive and/or magnetic material such as silver, copper, nickel, etc. (see abstract).

U.S. Patent No. 5,714,526 to Whyzmuzis is cited as teaching inks including pigments which may possess electrical or magnetic properties. The particular pigments cited as being of interest include ferrite yellow oxide, red iron oxides, ferric iron oxide brown and others, (column 6, lines 37-55).

U.S. Patent No. 4,879,148 to Neaves et al. teaches a marker. As shown in Figs. 1 and 2, a panel marker 1 includes a flat, flexible support layer 2 formed from a polyester sheet. On one side of the support layer 2 a powdered epoxy/polyamide curable coating 3 has been formed by a knife coating method. On the other side of the support layer 2 is a layer of polyamide hot-melt adhesive

¹Applicants object to the citation of the '381 patent in the rejection, since the reference is never applied in rejecting any of the pending claims.

4 and a silicone coated release paper 5. In use, the assembly is simply passed through a printer, for example an ink-jet printer, in order to print the indicia 6 on the porous layer and the printed marker is then exposed to an infrared radiation source for a period of about 3 to 5 minutes in order to fuse the epoxy and polyamide particles and initiate curing of the porous layer. The marker is then ready to be adhered to the surface by means of the hot melt adhesive layer 4. See column 6, lines 51-68.

Before addressing the rejection, Applicants respectfully submit that the use of the '422 patent in connection with a 35 U.S.C. §103(a) rejection was specifically challenged in the Appeal Brief filed in connection with the above-identified application. However, the Office Action does not address or even acknowledge Applicants' assertion regarding this issue. Thus, Applicants again assert that the '422 patent is drawn from nonanalogous art and, as such, is unavailable as a reference with respect to any of the pending claims.

Tuning to the instant rejection, Applicants submit that 35 U.S.C. §103 authorizes a rejection where to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. After indicating that the rejection is under 35 U.S.C. §103, the examiner should set forth in the Office Action (1) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate, (2) the difference or differences in the claim over the applied reference(s), (3) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (4) an explanation why such proposed modification would have been obvious to one of ordinary skill in the art at the time the invention was made. See M.P.E.P. §706.02(j).

It is respectfully submitted that the Office Action has not set forth a "prima facie" case of obviousness with respect to independent claim 1. For example, the '422 patent specifically teach two separate hot-pressing steps. In contrast, the 148 patent teaches away from this by teaching that two separate adhesive layers separated by a support layer in a [wire] marker can be cured during a single heating step. Thus, the '148 patent teaches away from the primary reference, i.e., the '422 patent. One of ordinary skill in the art, following the guidance found in the '422 patent, would be led in a direction divergent from the path that was taken by the Applicant because the '422 patent teaches away from the invention of claim 1. Since a reference which teaches away is a significant factor in

determining obviousness, the nature of that teaching is highly relevant and must be considered. See In re Gurley, 31 U.S.P.Q.2d 1130 (Fed. Cir. 1994). The Examiner's analysis gives no weight to the teachings in the applied reference which contradict the Examiner's position.

Moreover, the '422 patent and the '148 patent contain conflicting teachings. The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings in the prior art must be considered to the extent that they are in analogous arts. Where the teachings of two or more prior art references conflict, the Examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. See M.P.E.P. § 2143, citing In re Young, 18 U.S.P.Q.2d 1089 (Fed. Cir. 1991).

Furthermore, there is no cogent motivation (Item (4) in the criteria set forth above) set forth in the Office Action. The Office Action mere states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a conductive material and curable resin of the 526 patent and the epoxy resin of the '148 patent in the '422 patent since it is expected that improved properties of adhesion would result, since the curable resin and the adhesive resin material are similar and appear to be co-cured. In short, the gist of the motivation set forth in the Office Action appears to be that the substitutions between the three applied references would be within the skill of one of ordinary skill in the art. However, it is well settled that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See M.P.E.P. § 2143, citing In re Mills, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990).

In any event, Applicants submit that the proposed combination of reference would require that the process actually taught by the '422 patent be discarded in favor of the structure found in the '148 patent, while the ink actually taught by both the '422 patent and the '148 patent be discarded in favor of the ink formulations taught by the '526 patent. In other words, the propose combination of references can only be combined in a manner which obviates the invention of claim 1 by picking and choosing elements from conflicting references and then combining these isolated teachings, and

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discarding the residue. In short, the only possible way to combine the reference cited in the Office Action to produce the film carrier recited in claim 1 is through impermissible hindsight reconstruction of the invention.

For all of the reasons set forth above, it is respectfully submitted that the proposed combination of references could not render the invention of claim 1 obvious. Claims 3-5, 7-11, 23, and 27, recite further limitation of the invention of claim 1 and, thus, distinguish even further over the applied references. The Examiner is respectfully requested to reconsider and withdraw the 35 U.S.C. § 103(a) rejection of pending claims 3-5, 7-11, 23, and 27.

In light of the amendments and remarks presented above, it is respectfully submitted that the application is in condition for allowance, and such action is hereby solicited.

If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,
WESTERLUND & POWELL, P.C.

By 

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